

INDEX

A

ADAMS, N. D., Discussion on Army Fuel Consumption Studies of 1941-42....	95
ADLAM, T. NAPIER, Discussion on Performance of a Residential Panel Heating System	249
Air Conditioning, Warship Ventilating, Heating and, by T. H. URDAHL and W. C. WHITTLESEY	35
Air Conditioning System, Study of Actual vs. Predicted Cooling Load on an, by J. N. LIVERMORE	287
Air, Final Values of the Interaction Constant for Moist, by JOHN A. GOFF, J. R. ANDERSON and S. GRATCH	269
ANDERSON, J. R., S. GRATCH and JOHN A. GOFF, Final Values of the Interaction Constant for Moist Air	269
Discussion	283
ANNUAL MEETING, 1943, Forty-Ninth (Cincinnati, Ohio)	1
Army Fuel Consumption Studies of 1941-42 , by L. C. McCABE, S. KONZO and R. E. BILLER	75
Discussion	94
ASHLEY, C. M., Discussion on Summer Comfort Factors as Influenced by Thermal Properties of Building Materials	172
AVERY, L. T., Discussions on Performance of a Residential Panel Heating System	252
Some Engineering Problems of the New Vegetable Dehydration Industry....	57
Study of Actual vs. Predicted Cooling Load on an Air Conditioning System..	307

B

BETTS, H. M., Discussion on Graphical Method of Calculating Heat Losses....	353
BILLER, R. E., L. C. McCABE and S. KONZO, Army Fuel Consumption Studies of 1941-42	75
Discussion	94
BOELTER, L. M. K., and S. HORI, Spray Nozzle Performance in a Cooling Tower	309
Discussion	328
BOESTER, C. F., Discussion on The Effect of Convection in Ceiling Insulation..	207
Brass and Other Smooth Pipes, Friction Heads Due to Water Flow in Copper, by F. E. GIESECKE	175
Building Materials, Comparative Resistance to Vapor Transmission of Various, by L. V. TEESDALE	124
Building Materials, Summer Comfort Factors as Influenced by Thermal Properties of, by C. O. MACKEY and L. T. WRIGHT, JR.	148
BULL, A. S., Discussion on Comparative Resistance to Vapor Transmission of Various Building Materials	147

C

CARRIER, W. H., Discussions on Final Values of the Interaction Constant for Moist Air	283
Spray Nozzle Performance in a Cooling Tower	328
Study of Actual vs. Predicted Cooling Load on an Air Conditioning System..	306
Ceiling Insulation, The Effect of Convection in, by G. B. WILKES and L. R. VIANEY	196
CHESTER, THOMAS, Discussion on Study of Actual vs. Predicted Cooling Load on an Air Conditioning System	304
CLOSE, PAUL D., Graphical Method of Calculating Heat Losses.....	345
Discussion	353
Coal-Fired Space Heater, Performance Characteristics of, by R. C. CROSS.....	99
Coking Method for Smokeless Combustion, Use of the Down-Draft, by J. R. FELLOWS and J. C. MILES	254

Combustion, Use of the Down-Draft Coking Method for Smokeless, by J. R. FELLOWS and J. C. MILES	254
Comfort Factors as Influenced by Thermal Properties of Building Materials, Summer, by C. O. MACKEY and L. T. WRIGHT, JR.	148
Comparative Resistance to Vapor Transmission of Various Building Materials , by L. V. TEESDALE	124
Discussion	145
Conditioning, Warship Ventilating, Heating and Air, by T. H. URDAHL and W. C. WHITTLESEY	35
Constant for Moist Air, Final Values of the Interaction, by JOHN A. GOFF, J. R. ANDERSON and S. GRATCH	269
Convection in Ceiling Insulation, The Effect of, by G. B. WILKES and L. R. VIANEY	196
Cooling Load on an Air Conditioning System, Study of Actual vs. Predicted, by J. N. LIVERMORE	287
Cooling Tower, Spray Nozzle Performance in a, by L. M. K. BOELTER and S. HORI	309
COONLEY, HOWARD, Fuel Conservation	214
Copper, Brass and Other Smooth Pipes, Friction Heads due to Water Flow in, by F. E. GIESECKE	175
CROSS, R. C., Performance Characteristics of Coal-Fired Space Heater.....	99
Discussion	109

D

DANIELSON, W. A., Discussion on Army Fuel Consumption Studies of 1941-42..	94
DAVISON, R. L., Discussions on Army Fuel Consumption Studies of 1941-42....	95
Performance Characteristics of Coal-Fired Space Heater.....	109
Dehydration Industry, Some Engineering Problems of the New Vegetable, by W. B. VAN ARSDEL	49
DILL, R. S., Discussion on Heat Transmission Through Insulation as Affected by Orientation of Wall	341
Down-Draft Coking Method for Smokeless Combustion, Use of the, by J. R. FELLOWS and J. C. MILES	254
Ducts, Performance of Side Outlets on Horizontal, by D. W. NELSON and G. E. SMEDBERG	58

E

Effect of Convection in Ceiling Insulation, The , by G. B. WILKES and L. R. VIANEY	196
Discussion	202
Engineering Problems of the New Vegetable Dehydration Industry, Some, by W. B. VAN ARSDEL	49
ERICKSON, G. A., Discussion on Graphical Method of Calculating Heat Losses..	354

F

Factors as Influenced by Thermal Properties of Building Materials, Summer Comfort, by C. O. MACKEY and L. T. WRIGHT, JR.....	148
FAHNESTOCK, M. K., A. P. KRATZ and W. S. HARRIS, Operation of the Research Home with Reduced Room Temperatures at Night	111
FELLOWS, J. R., and J. C. MILES, Use of the Down-Draft Coking Method for Smokeless Combustion	254
Discussion	264
FERDERBER, M. B., F. C. HOUGHTEN and CARL GUTBERLET, Physiological Reactions Applicable to Workers in Hot Industries.....	188
Discussion	194
Final Values of the Interaction Constant for Moist Air , by JOHN A. GOFF, J. R. ANDERSON and S. GRATCH	269
Discussion	283

FLEISHER, W. L., Discussion on Physiological Reactions Applicable to Workers in Hot Industries	195
Flow in Copper, Brass and Other Smooth Pipes, Friction Heads due to Water, by F. E. GIESECKE	175
Forty-Ninth Annual Meeting, 1943 (Cincinnati, Ohio).....	1
Fuel Conservation, by HOWARD COONLEY	214
Fuel Consumption Studies of 1941-42, Army, by L. C. McCABE, S. KONZO and R. E. BILLER.....	75
Friction Heads Due to Water Flow in Copper, Brass and Other Smooth Pipes, by F. E. GIESECKE	175
Discussion	187

G

GEER, F. H., Discussion on Performance of Side Outlets on Horizontal Ducts..	74
GIESECKE, F. E., Discussions Army Fuel Consumption Studies of 1941-42.....	95
Performance of a Residential Panel Heating System	249
Study of Actual vs. Predicted Cooling Load on an Air Conditioning System..	307
GIESECKE, F. E., Friction Heads Due to Water Flow in Copper, Brass and Other Smooth Pipes	175
Discussion	187
GOFF, JOHN A., J. R. ANDERSON and S. GRATCH, Final Values of the Interaction Constant for Moist Air	269
Discussion	283
GORDON, P. B., Discussion on Performance of a Residential Panel Heating System	252
Graphical Method of Calculating Heat Losses, by PAUL D. CLOSE.....	345
Discussion	353
GRATCH, S., JOHN A. GOFF and J. R. ANDERSON, Final Values of the Interaction Constant for Moist Air	269
Discussion	283
GUTBERLET, CARL, M. B. FERDERBER and F. C. HOUGHTEN, Physiological Reactions Applicable to Workers in Hot Industries.....	188
Discussion	194

H

HADJISKY, J. N., Discussions on Comparative Resistance to Vapor Transmission of Various Building Materials.....	146
Friction Heads Due to Water Flow in Copper, Brass and Other Smooth Pipes	187
Summer Comfort Factors as Influenced by Thermal Properties of Building Materials	172
HARRINGTON, ELLIOTT, Discussion on Performance of a Residential Panel Heating System	252
HARRIS, W. S., M. K. FAHNESTOCK and A. P. KRATZ, Operation of the Research Home with Reduced Room Temperatures at Night	111
HART, H. M., Discussion on Graphical Method of Calculating Heat Losses....	355
HATTIS, R. E., Discussion on Study of Actual vs. Predicted Cooling Load on an Air Conditioning System	305
Heat Losses, Graphical Method of Calculating, by PAUL D. CLOSE	345
Heat Transmission Through Insulation as Affected by Orientation of Wall, by F. B. ROWLEY and C. E. LUND	331
Discussion	341
Heater, Performance Characteristics of Coal-Fired Space, by R. C. CROSS....	99
Heating and Air Conditioning, Warship Ventilating, by T. H. URDAHL and W. C. WHITTLESEY	35
Heating System, Performance of a Residential Panel, by H. F. RANDOLPH and J. B. WALLACE	235
HEILMAN, R. H., Discussion on The Effect of Convection in Ceiling Insulation	203
HILL, E. VERNON, Discussion on Graphical Method of Calculating Heat Losses	355
HOLT, JAMES, Discussion on Army Fuel Consumption Studies of 1941-42.....	96

HORI, S., and L. M. K. BOELTER, Spray Nozzle Performance in a Cooling Tower	309
Discussion	328
Horizontal Ducts, Performance of Side Outlets on, by D. W. NELSON and G. E. SMEDBERG	58
Hot Industries, Physiological Reactions Applicable to Workers in, by F. C. HOUGHTEN, CARL GUTBERLET and M. B. FERDERBER	188
HOUGHTEN, F. C., CARL GUTBERLET and M. B. FERDERBER, Physiological Reactions Applicable to Workers in Hot Industries	188
Discussion	194
HOUGHTEN, F. C., Discussion on Performance of a Residential Panel Heating System	252
HUMPHREYS, C. M., Discussions on Final Values of the Interaction Constant for Moist Air	285
Graphical Method of Calculating Heat Losses	357
HUTCHINSON, F. W., and B. F. RABER, Discussion on Performance of a Residential Panel Heating System	250

I

Insulation as Affected by Orientation of Wall, Heat Transmission Through, by F. B. ROWLEY and C. E. LUND	331
Insulation, The Effect of Convection in Ceiling, by G. B. WILKES and L. R. VIANEY	196

J

JAMES, JOHN, Discussions on Final Values of the Interaction Constant For Moist Air	285
Graphical Method of Calculating Heat Losses	356
Performance of a Residential Panel Heating System	252
JEHLE, FERDINAND, Discussion on Performance of a Residential Panel Heating System	252
JOHNSON, A. J., Discussion on Performance of a Residential Panel Heating System	250

K

KONZO, S., R. E. BILLER and L. C. McCABE, Army Fuel Consumption Studies of 1941-42	75
Discussion	94
KRATZ, A. P., Discussion on The Effect of Convection in Ceiling Insulation	207
KRATZ, A. P., W. S. HARRIS and M. K. FAIRNESTOCK, Operation of the Research Home with Reduced Room Temperatures at Night	111

L

LEWIS, H. E., Discussions on Comparative Resistance to Vapor Transmission of Various Building Materials	146
Graphical Method of Calculating Heat Losses	356
Some Engineering Problems of the New Vegetable Dehydration Industry	57
The Effect of Convection in Ceiling Insulation	202
LIMBACHER, H. R., Discussion on Performance Characteristics of Coal-Fired Space Heater	109
LIVERMORE, J. N., Study of Actual vs. Predicted Cooling Load on an Air Conditioning System	287
Discussion	304
LOYD, E. C., Discussion on Comparative Resistance to Vapor Transmission of Various Building Materials	145
Losses, Graphical Method of Calculating eat, by PAUL D. CLOSE	345
LUND, C. E., and F. B. ROWLEY, Heat Transmission Through Insulation as Affected by Orientation of Wall	331
Discussion	341

M

MACKEY, C. O., and L. T. WRIGHT, JR., Summer Comfort Factors as Influenced by Thermal Properties of Building Materials	148
Discussion	169
MCCABE, L. C., S. KONZO and R. E. BILLER, Army Fuel Consumption Studies of 1941-42	75
Discussion	94
MCRAE, M. W., Discussion on Use of the Down-Draft Coking Method for Smokeless Combustion	266
Method of Calculating Heat Losses, Graphical, by PAUL D. CLOSE.....	345
MILES, J. C., and J. R. FELLOWS, Use of the Down-Draft Coking Method for Smokeless Combustion	254
Discussion	264
MILLER, J. W., Discussion on Army Fuel Consumption Studies of 1941-42.....	96
MILLS, C. A., M.D., Discussion on Physiological Reactions Applicable to Workers in Hot Industries	194
Moist Air, Final Values of the Interaction Constant for, by JOHN A. GOFF, J. R. ANDERSON and S. GRATCH	269
MYLER, W. M., JR., Discussion on Use of the Down-Draft Coking Method for Smokeless Combustion	264

N

NELSON, D. W., and G. E. SMEDBERG, Performance of Side Outlets on Horizontal Ducts	58
Discussion	74
NEWPORT, C. F., Discussion on Use of the Down-Draft Coking Method for Smokeless Combustion	265
Night, Operation of the Research Home with Reduced Room Temperatures at, by A. P. KRATZ, W. S. HARRIS and M. K. FAHNESTOCK.....	111
NOTTAGE, H. B., Discussions on Friction Heads Due to Water Flow in Copper, Brass and Other Smooth Pipes	187
Summer Comfort Factors as Influenced by Thermal Properties of Building Materials	173
Nozzle Performance in a Cooling Tower, Spray, by L. M. K. BOELTER and S. HORI	309

O

Operation of the Research Home with Reduced Room Temperatures at Night , by A. P. KRATZ, W. S. HARRIS and M. K. FAHNESTOCK.....	111
Outlets on Horizontal Ducts, Performance of Side, by D. W. NELSON and G. E. SMEDBERG.....	58

P

Panel Discussion—Will Current Ventilating Systems Operation Undermine Public Health and Efficiency (Semi-Annual Meeting).....	220
Panel Heating System, Performance of a Residential, by H. F. RANDOLPH and J. B. WALLACE	235
PASCHKIS, VICTOR, Discussion on Summer Comfort Factors as Influenced by Thermal Properties of Building Materials	170
Performance Characteristics of Coal-Fired Space Heater , by R. C. CROSS..	99
Discussion	109
Performance in a Cooling Tower, Spray Nozzle, by L. M. K. BOELTER and S. HORI	309
Performance of a Residential Panel Heating System , by H. F. RANDOLPH and J. B. WALLACE	235
Discussion	249
Performance of Side Outlets on Horizontal Ducts, The , by D. W. NELSON and G. E. SMEDBERG	58
Discussion	74

Physiological Reactions Applicable to Workers in Hot Industries , by F. C. HOUGHTEN, CARL GUTBERLET and M. B. FERDERBER	188
Discussion	194
Pipes, Friction Heads Due to Water Flow in Copper, Brass and Other Smooth , by F. E. GIESECKE	175

R

RABER, B. F., and F. W. HUTCHINSON , Discussion on Performance of a Residential Panel Heating System	250
RANDOLPH, H. F., and J. B. WALLACE , Performance of a Residential Panel Heating System	235
Discussion	249
Reactions Applicable to Workers in Hot Industries, Physiological , by F. C. HOUGHTEN, CARL GUTBERLET and M. B. FERDERER	188
Research Home with Reduced Room Temperatures at Night, Operation of the , by A. P. KRATZ, W. S. HARRIS and M. K. FAHNESTOCK	111
Residential Panel Heating System, Performance of a , by H. F. RANDOLPH and J. B. WALLACE	235
Resistance to Vapor Transmission of Various Building Materials, Comparative , by L. V. TEESDALE	124
Room Temperatures at Night, Operation of the Research Home with Reduced , by A. P. KRATZ, W. S. HARRIS and M. K. FAHNESTOCK	111
ROWLEY, F. B., and C. E. LUND , Heat Transmission on Through Insulation as Affected by Orientation of Wall	331
Discussion	341

S

SEELEY, L. E. , Discussion on Army Fuel Consumption Studies of 1941-42.....	95
SEMI-ANNUAL MEETING, 1943 (Pittsburgh, Pa.)	211
SHERMAN, R. A. , Discussion on Use of the Down-Draft Coking Method for Smokeless Combustion	265
SLEMMONS, J. D. , Discussion on Some Engineering Problems of the New Vegetable Dehydration Industry	57
SMEDEBERG, G. E., and D. W. NELSON , Performance of Side Outlets on Horizontal Ducts.....	58
Discussion	74
Smokeless Combustion, Use of the Down-Draft Coking Method for , by J. R. FELLOWS and J. C. MILES	254
Some Engineering Problems of the New Vegetable Dehydration Industry , by W. B. VAN ARSDEL	49
Discussion	57
Space Heater, Performance Characteristics of Coal-Fired , by R. C. CROSS....	99
Spray Nozzle Performance in a Cooling Tower , by L. M. K. BOELTER and S. HORI	309
Discussion	328
Study of Actual vs. Predicted Cooling Load on an Air Conditioning System , by J. N. LIVERMORE	287
Discussion	304
Summer Comfort Factors as Influenced by Thermal Properties of Building Materials , by C. O. MACKEY and L. T. WRIGHT, JR.	148
Discussion	169

T

TASKER, CYRIL , Discussions on Performance of a Residential Panel Heating System	252
Some Engineering Problems of the New Vegetable Dehydration Industry ...	57
TEESDALE, L. V. , Comparative Resistance to Vapor Transmission of Various Building Materials	124
Discussion	145

Temperatures at Night, Operation of the Research Home with Reduced Room, by A. P. KRATZ, W. S. HARRIS and M. K. FAHNESTOCK.....	111
Thermal Properties of Building Materials, Summer Comfort Factors as Influenced by, by C. O. MACKEY and L. T. WRIGHT, JR.....	148
THULMAN, R. K., Discussions on Graphical Method of Calculating Heat Losses	356
Heat Transmission Through Insulation as Affected by Orientation of Wall..	344
Tower, Spray Nozzle Performance in a Cooling, by L. M. K. BOELTER and S. HORI	309
Transmission of Various Building Materials, Comparative Resistance to Vapor, by L. V. TEESDALE	124
Transmission Through Insulation as Affected by Orientation of Wall, Heat, by F. B. ROWLEY and C. E. LUND.....	331
TUCKER, T. T., Discussions on Heat Transmission Through Insulation as Affected by Orientation of Wall.....	342
The Effect of Convection in Ceiling Insulation.....	207
TUTTLE, G. H., Discussion on Army Fuel Consumption Studies of 1941-42....	94
TUVE, G. L., Discussions on Heat Transmission Through Insulation as Affected by Orientation of Wall	344
The Effect of Convection in Ceiling Insulation.....	207

U

URDAHL, T. H., and W. C. WHITTLESEY, Warship Ventilating, Heating and Air Conditioning	35
Discussion	44
Use of the Down-Draft Coking Method for Smokeless Combustion, by J. R. FELLOWS and J. C. MILES.....	254
Discussion	264

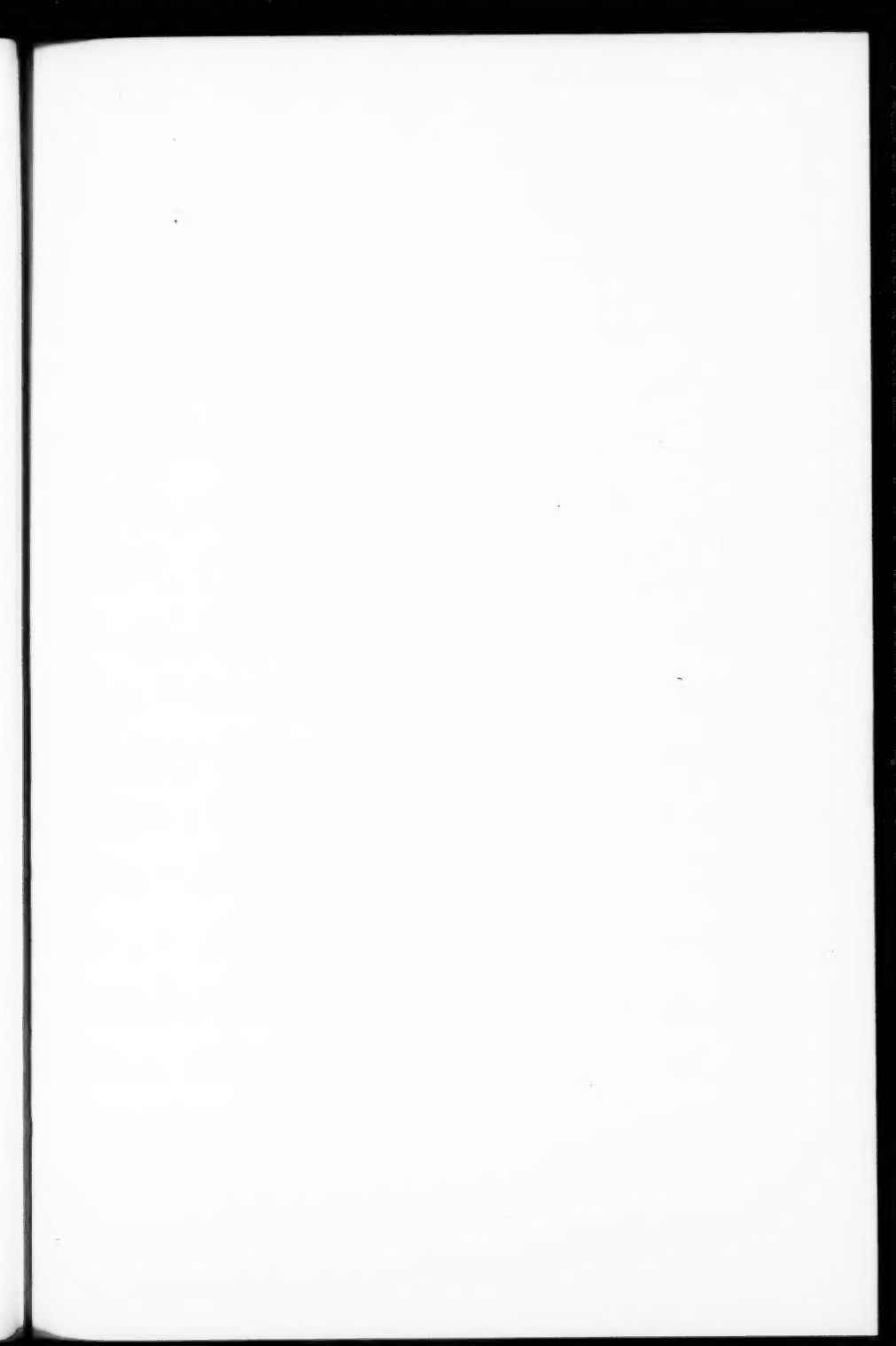
V

VAN ARSDEL, W. B., Some Engineering Problems of the New Vegetable Dehydration Industry	49
Discussion	57
Vapor Transmission of Various Building Materials, Comparative Resistance to, by L. V. TEESDALE	124
Vegetable Dehydration Industry, Some Engineering Problems of the New, by W. B. VAN ARSDEL	49
Ventilating, Heating and Air Conditioning, Warship, by T. H. URDAHL and W. C. WHITTLESEY	35
VIANEY, L. R., and G. B. WILKES, The Effect of Convection in Ceiling Insulation	196
Discussion	202
VIANEY, L. R., Discussion on Heat Transmission Through Insulation as Affected by Orientation of Wall	342

W

WALKER, J. H., Discussion on Study of Actual vs. Predicted Cooling Load on an Air Conditioning System	305
Wall, Heat Transmission Through Insulation as Affected by Orientation of, by F. B. ROWLEY and C. E. LUND.....	331
WALLACE, J. B., and H. F. RANDOLPH, Performance of a Residential Panel Heating System.....	235
Discussion	249
Warship Ventilating, Heating and Air Conditioning, by T. H. URDAHL and W. C. WHITTLESEY.....	35
Discussion	44
Water Flow in Copper, Brass and Other Smooth Pipes, Friction Heads Due to, by F. E. GIESECKE.....	175
WHITTLESEY, W. C., and T. H. URDAHL, Warship Ventilating, Heating and Air Conditioning	35
Discussion	44

WILKES, G. B., and L. R. VIANEY, The Effect of Convection in Ceiling Insulation	196
Discussion	202
WILSON, V. H., Discussion on Army Fuel Consumption Studies of 1941-42...	96
WINSLOW, C.-E. A., Discussion on Performance of a Residential Panel Heating System	252
WOODS, B. M., Discussion on Spray Nozzle Performance in a Cooling Tower..	330
Workers in Hot Industries, Physiological Reactions Applicable to, by F. C. HOUGHTEN, CARL GUTBERLET and M. B. FERDERBER.....	188
WRIGHT, JR., L. T., and C. O. MACKEY, Summer Comfort Factors as Influenced by Thermal Properties of Building Materials	148
Discussion	169





Merrill W. Shanklin

PRESIDENT 1943

AMERICAN SOCIETY OF HEATING AND VENTILATING ENGINEERS